

MadgeTech Electronic Temperature Data Loggers

Monitoring of Temperature-Sensitive Products

Product Features

- Economical
- User friendly with easy-to-read data
- High accuracy data
- Convenient sizes
- Log wide ranges of temperatures

Single- and Multi-Use Data Loggers

MadgeTech data loggers are designed to measure payload area temperature conditions during the shipment and storage of a wide variety of cold chain medical and pharmaceutical applications, including plasma and red cell, blood banks, frozen tissue, and vaccines.

The **Cryo-Temp** (multi-use) ultra low temperature data recorder has a recording range from -86°C to $+35^{\circ}\text{C}$, with up to 32,767 measurement readings. This stand-alone splash-resistant and splash-proof (IP65) device does not require additional probes. The enclosure is designed with a handle for easy attachment. For quick download to a PC, the Cryo-Temp utilizes the IFC300 USB docking station and software package (sold separately).

The **TransiTempII** (multi-use) temperature logger measures and records temperatures from -40°C to $+80^{\circ}\text{C}$, with up to 32,767 N.I.S.T. traceable measurement readings. This splash-proof (IP65) temperature data logger features a highly precise semiconductor temperature sensor and an ABS plastic enclosure. For quick download to a PC, the TransiTempII utilizes the IFC300 USB docking station and software package (sold separately).



MadgeTech Data Loggers

The **TransiTemp-EC** (single-use) and **TransiTemp-EC-Multi** (multi-use) temperature loggers are designed for high volume, low cost in-transit recordings. Both have handles for convenient attachment. These compact, portable, easy-to-use devices will measure and record temperatures from -20°C to $+70^{\circ}\text{C}$, with up to 8,191 measurement readings. The storage medium is non-volatile solid state memory, providing maximum data security even if the battery becomes discharged. Data off loading, and analysis/retrieval can be performed by simply plugging an interface cable (IFC 103, sold separately) into a COM or USB port (with a compatible USB->Serial converter). The manual and required software are included with the IFC 103.

Source:

www.madgetech.com

MadgeTech Logger Specifications				
	Cryo-Temp Ultra Low Temp Recorder (Multi-Use)	TransiTempII (Multi-Use)	TransiTemp-EC (Single-Use)	TransiTemp-EC-Multi (Multi-Use)
Sensor	NTC Thermistor	Internal Semiconductor	Internal Semiconductor	Internal Semiconductor
Temperature Range	-86°C to +35°C recommended; may be used up to +55°C; may be used down to -90°C	-40°C to +80°C	-20°C to +70°C	-20°C to +70°C
Resolution	0.1°C	0.1°C	0.1°C	0.1°C
Calibrated Accuracy	±1.0°C (-80°C to +0°C)	±0.5°C (-10°C to +40°C) ±1.0°C (-20°C to +70°C)	±0.5°C (-10°C to +40°C) ±1.0°C (-20°C to +70°C)	±0.5°C (-10°C to +40°C) ±1.0°C (-20°C to +70°C)
Memory	32,767 readings	32,767 readings	8,191 readings	8,191 readings
Delayed Start	0 to 30 days	0 to 30 days	0 to 30 days	0 to 30 days
Sample/Reading Rate	5 seconds to 30 minutes	5 seconds to 30 minutes	5 seconds to 30 minutes	5 seconds to 30 minutes
Alarm	Yes	Yes	Yes	Yes
Battery Type	3.6V lithium battery (LTC-7PN), factory replaceable only.	3.6V lithium battery (LTC-7PN), factory replaceable only.	3V lithium coin cell included	3V lithium coin cell included
Battery Life	2 years typical @ 25°C, 1 min. reading intervals. 1 year typical @ -80°C, 1 min. reading intervals.	1 year typical @ 25°C, 1 min., reading intervals.	90 days typical @ 25°C, 5 min. reading rate.	90 days typical @ 25°C, 5 min. reading rate
Shelf Life	~1-1/2 Years from Date of Manufacture	~1-1/2 Years from Date of Manufacture	~1-1/2 Years from Date of Manufacture	~1-1/2 Years from Date of Manufacture
Time Accuracy	±2 minutes/ month max. at 20°C to 30°C. ±5 minutes/ month max. at -80°C.	±2 minutes/ month at 25°C. ±5 minutes/ month max. at -10°C to +40°C.	±2 minutes/ month at 25°C.	±2 minutes/ month at 25°C.
Easy Data Export to MS Excel	Yes	Yes	Yes	Yes
Data Format	Date and time stamped °C, °F, °K, °R.	Date and time stamped °C, °F, °K, °R.	Date and time stamped °C, °F, °K, °R.	Date and time stamped °C, °F, °K, °R.
Interface/Baud Rate	IFC300 docking station 38,400 baud	IFC300 docking station 38,400 baud	IFC103 interface cable 38,400 baud	IFC103 interface cable 38,400 baud
Software	Windows 95/98/ME/NT/2000/XP/Vista based (32 bit)	Windows 95/98/ME/NT/2000/XP/Vista based (32 bit)	Windows 95/98/ME/NT/2000/XP/Vista based (32 bit)	Windows 95/98/ME/NT/2000/XP/Vista based (32 bit)
Logger Dimensions	3.3" x 2.1" x 0.4" (83mm x 54mm x 11mm)	3.3" x 2.1" x 0.4" (83mm x 54mm x 11mm)	1.7" x 2.6" x 0.6" (44mm x 67mm x 16mm)	1.7" x 2.6" x 0.6" (44mm x 67mm x 16mm)
Logger Weight	1.4 oz. (40g)	1.4 oz. (40g)	0.9 oz. (25g)	0.9 oz. (25g)
Splash Resistant	Yes (IP65)	Yes (IP65)	Not submersible	Not submersible
NIST Certification	Yes	Yes	Yes	Yes

COLD CHAIN TECHNOLOGIES

Engineered Solutions for Thermal Packaging

Cold Chain Technologies
29 Everett Street
Holliston, MA 01746

T: 800.370.8566 / 508.429.1395
F: 508.429.9056
W: www.coldchaintech.com
E: info@coldchaintech.com

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